BUD-FORMATION IN SYLLIDS

Potts (Q. J. M. S. Jan. 1913) proposes the following classification of budding found in these worms:—

1. Linear budding (terminal). Stolons produced at the end of the stock, and arranged end to end in chains, e. g. *Autolytus.*

2. Lateral budding. Stolons produced singly as lateral outgrowths from the stock. *Syllis ramosa.*

3. Collateral budding (ventro-terminal). Stolons produced from a ventro-terminal proliferating cushion on the stock, and arranged side by side in rows. *Trypanosyllis gemmipara.*

In this latter genus the author has made a study of the formation of the buds. The process is as follows:—The leucocytes collect in the mesoblast of the posterior segments where the buds are to appear; the epiblast gives rise to cell proliferations which begin the stolons; the mesoblast from the stock invades these young stolons; the mesoblast proliferates and shows its first signs of segmentation in the form of incipient septa; two bundles of muscle fibres and a single ventral nerve cord grow directly from the corresponding structures of the stock into the stolon; the epiblast of the stolon segments and forms its appropriate segmental structures.

Those who have studied the formation of new segments in the segment-forming zone of worms will be impressed with the similarity between the processes.

CORK OAK IN PORTUGAL

Klein (Naturwiss. Zeitschr. Forst- und Landwirtsch. Nov. 1902) discusses the cork oak and its products in Portugal in a very interesting article. As is well known this oak, *Quercus suber,* is native to Southern Europe. In Portugal there are some 550,000 acres of this oak. During the first 20 to 25 years its growth and cork production are rapid, and at the end of this period a crop may be gathered. The cork oak forests are mostly private property and are rented for periods of 20 to 40 years, or worked by the owner. The most of the old forests are natural; but of recent years new forests are being planted of acorns selected from known prolific trees. In such plantations the first crop may be had in 10 years.